

QUALITY IN HIGHER EDUCATION: ASPECTS REGARDING THE MEASURABILITY OF HIGHER EDUCATION QUALITY

Marian Cărăuș, Assist. Prof., PhD, "Lucian Blaga" University of Sibiu

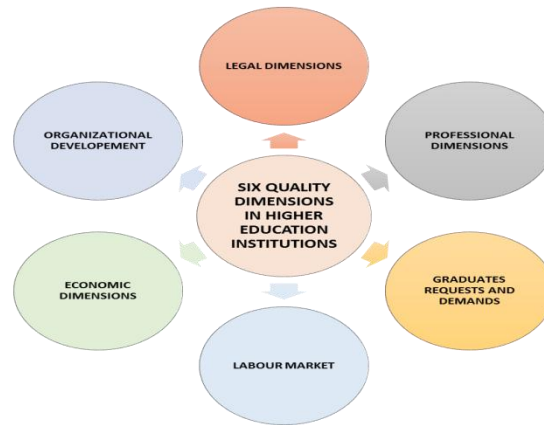
Abstract: In Romania, according to current regulations, providing quality educational services is the responsibility of each institution of HE. The university quality assurance system integrates both an organizational structure and a set of multi-level principles and rules relating to the policies, quality assurance strategies, evaluation methodologies, development and monitoring of study programs, qualifications, and resources used in the learning process. This paper sets out to examine several aspects regarding the complexity of QA in HEIs as well as the measurability potential of six university-level complex quality dimensions.

The implementation of the quality assurance (QA) requirements designed at national level as well as the medium and long term QA and quality management (QM) strategies have been key issues on the working agenda of the Romanian HE institutions in their drive to ensure the quality of educational services and scientific research. Romanian HE institutions (HEIs) have implemented changes that have affected seminal aspects of their functionalities and operations – teaching, research, governance, management, funding, etc. – and have developed quality assurance processes designed to monitor and improve the quality of their activities. They have become more strategic and have come to view internationalization and information and communication technologies as key to promoting the intellectual vitality of their institutions. They have found ways to serve better their local communities – by broadening access and supporting a variety of learners and by engaging more significantly with employers and industry—all the while extending (more aggressively) their reach internationally. These changes have been significant, positive and more oriented and committed to public interest.

The starting point of this paper's focus represents the Dutch university working group meeting "Quality Assurance in the HBO", under the leadership of Professor Petra van Dijk of the University of Rotterdam, which had a decisive role in defining the quality of institutions of HE as reflected in the quality assessment guidelines they produced on that occasion. They agreed on six dimensions of quality in HE institutions¹ as illustrated in Figure 1.

Figure 1. Quality Dimensions of HE

¹Nica, P., Managementul calității și ierarhizarea universităților românești, Ed. Paideia: București, 2000.



These dimensions are:

- *The legal dimension*, which concerns the extent to which the legal regulations and specific procedures are implemented and applied in HE institutions;
- *The professional dimension*, which concerns the harmonization of the teaching process with the accepted professional standards set for each field and specialization of HE;
- *The economic dimension*, which concerns the achievement of all educational process aimed at achieving a certain level of expenditure embodied in cost, time, equipment and personnel;
- *Graduates' requests and demands* represent a dimension that indicates the extent to which services are consistent with the hopes, expectations and personal needs of customers;
- *The labour market*, which targets the ability of HE institutions to meet the labour market demands;
- *The organizational development*, which concerns the extent to which HE institutions can develop and implement organizational strategies in accordance with the educational system requirements and objectives.

The above dimensions identified by the Dutch working group may be harmonized with the requirements of the Romanian quality assurance issues that can be measured. Making an analogy with the same concept, Romanian HE has embarked on a route that rests on the necessity to ensure quality through standards, benchmarks and performance indicators, and then continues through practical and periodic external evaluations of professional bodies in the field.

In a graphic representation, this path starts with the normative regulations and procedures in particular areas of institutional assessment, which, in terms of accounting as a primary source of information, can be partially measured (Mp). A continuation of this entails the entire learning process in accordance with the professional standards established by fields and specializations, a stage we believe is measurable (N).

The economic dimension is materialized through the educational goals requiring a certain level of expenditure that is to be reflected in measurable (M) costs, time, equipment and personnel. Then the satisfaction, expectations, requirements, desires and personal needs

level represents a very important stage of our educational route, based on the idea that the services offered by the institution must meet its customers' expectations. This is hardly ever measurable (N). The capacity of HE institutions to meet labour market demands by preparing graduates in professions that are in (high) demand is also a critical level stage of our journey. In this context, we believe that based on the management accounting this part of our route is measurable (Mp).

Finally, the organizational dimension is the terminal point of our route which reflects the ways in which the HE institution is capable of developing and implementing strategies in accordance with the requirements and objectives of the entire educational system. This QA essential component is deemed to be measurable (M), at least from the perspective of management accounting.

Table 1. Quality measurement in HE by means of accounting instruments

Quality Dimension	Content	Measurable (M) Non-measurable (N)	Measurable by means of the accounting system (M) or not (N)
Legal Dimension	Implementation of legal regulations and procedures specific to HE	M	Mp
Professional Dimension	Harmonization of teaching and learning process with the professional standards by fields and specializations	M	N
Economic Dimension	Achievement of educational goals requiring a certain level of expenditure	M	M
Satisfaction Dimension	Extent to which services are in accordance with graduates' hopes, expectations and personal needs	M	N
Labour market Dimension	Adaptability of HEIs to labour market demands	M	Mp
Organisational Dimension	Capacity of HEIs to elaborate and implement organizational strategies in accordance with educational system objectives	M	N

Legend: M = measurable, Mp = partially measurable, N = non-measurable

All these stages of HE quality and performance may receive, based on the information they provide, the characteristics of *measurable* and/or *non-measurable* and may be retained in the accounting system through their functions, principles, conventions and effective records.

Through its methods and goals - providing general, practical and useful analytical information through instruments and procedures, accounting can be, even if not all of the above-mentioned dimensions are measurable, an important information storage source that

may be used in synthetic accounting reports for any period requested. Education represents a quality service that the HE institution offers to students and the society. The result is the training of the future service specialist (graduate) regarded both as a participant in the educational process and a direct beneficiary of this process. Likewise, in any implementing program of a quality system the human factor represents the primary factor that determines the success of the program inclusive of mindset and cultural components. Taking stock and full responsibility for the personnel's work quality can be fully realized in an environment where consolidated recognition and promotion motivate performance. In carrying out the educational process and scientific research, universities must promote the following basic QM principles in line with current European and international trends:

- *Customer and stakeholders focus*: university must identify current and future requirements of its customers and other stakeholders, ensuring their satisfaction;
- *Leadership*, which includes a clear vision on the future of the university, a proactive attitude, an understanding of the changes in the external environment and an adequate response to these changes, a climate of trust between university members and the community and last but not least, an open and honest communication.
- *Involvement of staff*, which includes enhancement of skills, knowledge and experience in the relationship with customers and other stakeholders; sharing of team knowledge and experience; accountability for problem solving; active involvement in identifying improvement opportunities as well as a creative spirit in designing future goals of the university.
- *Procedural approach* to all activities is to be made by: identification and evaluation of input and output data of all activities and the interfaces of functional entities activities; risk consequences and impact assessments on customers and other interested parties; establishment of clear responsibilities and authority management processes.
- *Systemic approach to management level* is to be made through: integration of processes involved in the relationship with customers and other stakeholders as well as with the corresponding activities within the university (from management requirements and identification and provision of the necessary resources to assessment and analysis of outcomes). The evaluation and analysis of results are performed by the university management functional entities in order to identify ways for education quality improvement.
- *Continuous improvement of educational services and research* through: continuous improvement of all processes; periodic assessment of the evaluation criteria established to identify areas in which improvements need to be made; enhancement of effectiveness and efficiency of all processes in the university; promotion of prevention-based activities; recognition of results obtained by each member of the academic community.
- *Rational argumentation of managerial decisions* by means of: efficient data collection and information relevant to set objectives and goals; measures to ensure that all information is clear, available and accessible; appropriate methods used for data and information analysis.

“The stated mission of HEIs is either education and research or education, by itself”². More specifically, the mission of HE is to meet the specific needs of the education and training of citizens, as well as the socio-economic needs of local and national communities. Universities perform their task only to the extent that they meet these necessities at a qualitative standard that enable all individuals and the society to function well in a globalized, competitive environment. Achieving such standards is possible only by means of a performance-oriented HE, through a well performing academic and administrative management, through a constant improvement of supply and results in a responsible attitude of the staff.

In Romania, evaluation of study programs and HE institutions is carried out on the basis of an external evaluation Methodology containing benchmarks and performance indicators which is elaborated by the Romanian Agency for Quality Assurance in HE (ARACIS). "Its mission consists in performing the external evaluation of the quality of education offered by HE institutions in Romania"³ and its designed rigorous and measurable performance indicators and standards are used for:

- Provisional authorization of Bachelor and Master study programs;
- Accreditation of Bachelor and Master study programs;
- External quality assessment for institutional accreditation;
- Periodic external quality assessment at institutional level of accredited HE institutions;
- External evaluation of Teacher Training Departments in HE institutions;
- External evaluation of Departments and long distance and part-time study programs.

The external evaluation identifies the QA domains and criteria on three generic levels regarding:

Institutional capacity focusing on:

1. managerial component;
2. administrative component;
3. institutional structures;
4. facilities;
5. human resources;

Efficacy, with a focus on:

1. content of study programs;
2. learning outcomes;
3. research activities;
4. financial activities;

Quality management with criteria focusing on:

1. analysis of QA strategies and procedures;
2. procedures for establishment, monitoring and revision of study programs;
3. objective and transparent procedures of learning outcomes evaluation;
4. periodic staff evaluation;
5. accessibility of learning resources and internal QA database;
6. functionality of QA structures;

²Florea, Silvia and Wells, J. Peter, *HE in Romania*. Monographs on HE, UNESCO-CEPES: Bucharest, 2011.

³Ibid.

7. transparency of HEI information.

Within this framework, each criterion of a domain corresponds to a set of standards, and each standard corresponds to a set of performance indicators. From a conceptual standpoint, all standards are considered to be generic statements aimed at making operational a given criteria, whereas performance indicators are formulated to enable HEIs to establish and determine the minimum quality requirements in order to design and achieve better results and performance over this minimum level of quality. Quality requirements of HEIs activities are defined by means of standards, benchmarks, and performance indicators.

The standards define the minimum level required for the achievement of higher education activities and result in a set of performance indicators. Reference standards set the optimal level of achievement of university activities based on best national and international practices in higher education.

Performance indicators represent the tools for measuring the achievement of higher education activities in relation to a standard. They range from an identifiable minimum level to an acceptable maximum level. The minimum level of a performance indicator meets the requirements of a standard, whereas the maximum corresponds to a reference standard. Both are optional and differentiate HEQ progressively. The external evaluation of study programs or higher education institutions for provisional authorization, accreditation or periodic evaluation is based on the minimum levels of standards and performance indicators. When maximum levels of standards and performance indicators are found during evaluation visits, a high assessment is awarded leading to a better hierarchization of that particular study program and hence university in the national rankings.

Quality assurance in Romanian HE is based on the criteria, standards and performance indicators used by ARACIS and higher education institutions for:

- reference in HE QM;
- database and information on QA status in HE;
- assessment and external QA by ARACIS with a view to developing a quality culture.

There are interdependent correspondences between the activities and structure of HEIs on the one hand, and the requirements that correspond to the standards, benchmarks and performance indicators, on the other. The criteria relate to each of the three areas established by law representing fundamental aspects of HE organization. They are illustrated below.

Figure 2. Interdependence of relations

Domains for HE QA		
A. Institutional Capacity	B. Educational Efficacy	C. QM
Criteria in indicated domains		

Standards	
Standards	Reference Standards

Performance Indicators

The role of the corresponding standards is critical for the orientation of HEIs to quality self-evaluation, for the corroboration of institutional self-evaluation reports, for database and information for external evaluation and, last but not least, for QA and accreditation common reference framework.

By way of conclusion, all these quality assurance levels, enhanced by rigorous criteria, standards and performance indicators used in quality assurance and accreditation by ARACIS bespeak the far-reaching diversity and complexity of QA levels and factors in HEIs. Several stages of HE quality and performance may be, based on the information they provide, measurable or non-measurable and may be retained in the university's accounting system through their functions, principles, conventions and effective records, ultimately leading to a better institutional by all means, functional control.

REFERENCES:

ARACIS, *Metodologia cadru*, octombrie 2011.

Florea, Silvia and Wells, J. Peter, *HE in Romania*. Monographs on HE, UNESCO-CEPES: Bucharest, 2011.

Nica, P., *Managementul calității și ierarhizarea universităților românești*, Ed. Paideia: București, 2000.